

Amendments to the Drawings

A corrected Fig. 43 is enclosed.

REMARKS/ARGUMENTS

In response to the Examiner's first Office Action of November 15, 2005 the Applicant respectfully submits the accompanying Terminal Disclaimer with respect to USSN 10/760,246, Amendment to the specification, drawings and claims, and the below Remarks directed thereto.

Regarding Amendment

In the Amendment:

pages 1, 2, and 32 of the present specification are amended to replace docket numbers with US Application numbers and US granted Patent numbers where applicable.

page 13, line 3, page 14, line 22, page 17, line 9 and 37 and page 22, line 1 of the present specification are amended to omit reference to Fig. 17C;

Fig. 43 is amended to include the reference sign "500", as is described at page 8, lines 5-13 of the present specification;

independent claim 1 is amended to clarify that the printhead module comprises an elongate support member and that the capping member caps a terminal longitudinal end of the support member. Claim 1 is further amended to specify that the longitudinal ends of the support member are configured differently and complementarily to one another and that the capping member is configured to cap either of the longitudinal ends. Support for these amendments can be found at page 6, lines 1-31 and page 9, line 13-page 11, line 11 of the present specification;

dependent claim 3 is amended to replace the recitation "the interconnected capping member and printhead module" with --the interconnected capping and support members--;

dependent claim 4 is amended to correct its dependency to claim 3;

dependent claim 5 is amended to clarify that at least two fluid distribution members are provided, each for one of the printhead integrated circuits. Support for this amendment can be found at page 6, lines 25-31 and page 7, line 29-page 8, line 9 of the present specification; and

dependent claims 2 and 3 are unchanged.

It is respectfully submitted that the above amendments do not add new matter to the present application.

Regarding Drawing Objections

Regarding Fig. 17C

It is respectfully submitted that the above-described amendments to omit reference to Fig. 17C in the present specification, provides the correction required by the Examiner.

Regarding reference sign "500"

It is respectfully submitted that the above-described amendment to Fig. 43 to insert the reference sign "500", provides the correction required by the Examiner.

Regarding Claim Objections

Regarding "fluid distribution member"

It is respectfully submitted that the above-described amendment to claim 5 to clarify that at least two fluid distribution members are provided, each for one of the printhead integrated circuits, provides the correction required by the Examiner, as this clarifies that the claimed fluid distribution members refer to the disclosed fluid distribution stacks 500 (see page 6, lines 25-31 and page 7, line 29-page 8, line 9 of the present specification).

Regarding "the interconnected capping member and printhead module"

It is respectfully submitted that the above-described amendment to claim 3, provides sufficient antecedent basis for the amended limitation in the claim.

Regarding "the fluid distribution members"

It is respectfully submitted that the above-described amendment to claim 5 to clarify that at least two fluid distribution members are provided at line 3 of claim 5, provides sufficient antecedent basis for this term later in the claim.

Regarding Claim 4

It is respectfully submitted that the above-described amendment to the dependency of claim 4, provides the correction required by the Examiner.

Regarding Provisional Double Patenting Rejections

With respect to the provisional non-statutory double patenting rejection of pending claims 1-5 over claims 1-5 of copending Application No. 10/760,246 in view of Milan (US

5,568,158), a terminal disclaimer in compliance with 37 C.F.R. 1.321(c) is being submitted herewith; the present application and Application No. 10/760,246 being commonly owned by the Applicant.

Regarding 35 USC 102(b) Rejections

It is respectfully submitted that the subject matter of amended independent claim 1, and claim 5 dependent therefrom, is not disclosed by Silverbrook et al. (US 6,439,908), for at least the following reasons.

In the present invention, each printhead module 30 has two or more printhead tiles/integrated circuits 50,51 arranged on an elongate fluid channel member 40. At least two of these printhead modules are longitudinally assembled within a casing 20 to form a printhead. Multiple printhead modules, each having multiple printhead tiles, are used in the printhead assembly so that replacement of the modules and selection of printhead length are easily provided without the need to provide individual controllers and connections for each printhead integrated circuit.

Easy connection and operation of the multiple modules is provided by complementarily configuring the longitudinal ends of the fluid channel members so that they may communicate printing fluid with each other across the printhead assembly. By providing the modules in this way, scalability of the printhead assembly is provided without the need to redesign the printing fluid distribution arrangement. When the length of the printhead assembly requires only one ink supply, a sealing member 49 is used to cap the longitudinal end of the terminal fluid channel member. Further advantages are provided by configuring the sealing member to be able to cap either end of the fluid channel members (see page 6, lines 1-31 and page 9, line 13-page 11, line 22 and Figs. 14A and 14B of the present application). Amended independent claim 1 recites these features of the present invention.

On the other hand, Silverbrook discloses an arrangement in which each printhead module 12 has a single microelectromechanical chip 18 and support molding 26,28. Each module is plugged into a reservoir molding 32 housing an ink reservoir 16. Each module may be removed from the reservoir molding, however scalability of the printhead assembly 10 is not provided, as the reservoir molding is a set length.

Thus, the support molding is not an elongate molding arranged to carry at least two chips as required by amended independent claim 1. Further, the floor 34 provided by the cooperation of the TAB film 22 and the molding 26, used by the Examiner as a capping member in the context of the claimed invention, does not constitute a capping member which caps a terminal longitudinal end of an elongate support member (see col. 2, lines 2-50 of Silverbrook).

Furthermore, the disclosure of Silverbrook does not teach or suggest one of ordinary skill in the art to modify the disclosed assembly, because Silverbrook specifically teaches that the modularity is provided by the plugging in of the modules into the reservoir molding.

Thus, the subject matter of amended independent claim 1, and claims 2-7 dependent therefrom, is not disclosed or suggested by Silverbrook.

Regarding 35 USC 103(a) Rejections

Regarding Claim 2

It is respectfully submitted that the subject matter of dependent claim 2 is not taught or suggested by Silverbrook in view of Milan, for at least the following reasons.

Milan discloses a modular surge protection system 20 in which power modules 21 are interconnected at male and female portions 41 and 42 (see col. 5, lines 1-11 of Milan). Milan does not teach or suggest providing a capping member for capping a terminal longitudinal end of an elongate support member for supporting and carrying printing fluid of printhead integrated circuits, as required by amended independent claim 1.

Therefore, there is no motivation for one of ordinary skill in the art to combine Silverbrook and Milan as the Examiner asserts, and even if there was some motivation, the combination would not provide a capping member configured to cap either end of the support moldings of Silverbrook in the manner recited in amended independent claim 1, since the support moldings of Silverbrook are not elongate and do not hold more than one of the disclosed chips.

Thus, the subject matter of amended independent claim 1, and claims 2-5 dependent therefrom, is not disclosed or suggested by Silverbrook either taken alone or in combination with Milan.

Regarding Claims 3 and 4

It is respectfully submitted that the subject matter of dependent claims 3 and 4 is not taught or suggested by Silverbrook in view of Milan and further in view of Spivey (US 6,190,002), for at least the following reasons.

Spivey merely discloses an assembly of printheads 42,46,50,54 and associated semiconductor chips 55 which are attached to pen body 58 using epoxy adhesive 66 which is cured to secure the attachment (see col. 5, lines 1-3 and col. 6, lines 7-17 of Spivey). Thus, Spivey does not make up for the above-discussed deficiencies in the Examiner's combination of Silverbrook and Milan.

Thus, the subject matter of amended independent claim 1, and claims 2-5 dependent therefrom, is not disclosed or suggested by Silverbrook or Milan either taken alone or in combination with Spivey.

It is respectfully submitted that all of the Examiner's objections and rejections have been traversed. Accordingly, it is submitted that the present application is in condition for allowance and reconsideration of the present application is respectfully requested.

Very respectfully,

Applicants:



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